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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,993	06/30/2003	Yong-Seog Jeon	P23872	8181
7055	7590	12/13/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C.			WILLIAMS, JOSEPH L	
1950 ROLAND CLARKE PLACE			ART UNIT	
RESTON, VA 20191			PAPER NUMBER	

2879

DATE MAILED: 12/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/607,993	Applicant(s) JEON ET AL.	
	Examiner Joseph L. Williams	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-14 and 17 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 5 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Choi et al. (US 6,734,630 B1).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Art Unit: 2879

Regarding claim 1, Choi ('630) teaches in column 3, lines 38-45, a bulb of an electrodeless lamp system using stannum (Sn) as a primary bulb fill in order to continuous spectrum in discharging.

Regarding claim 2, Choi ('630) teaches the primary bulb fill is a halogenide of the Sn.

Regarding claim 3, Choi ('630) teaches the halogenide of the Sn is stannum bromide (SnBr₂).

Regarding claim 5, Choi ('630) teaches the use of argon as a buffer gas.

Regarding claim 8, the claim limitation is an intended use claim. Structure claims are directed towards what the structure is, not what it does. Thus the claimed limitation of the capacity of the bulb has not been given patentable weight. The structural limitation of the bulb itself was disclosed in figure 1, part 4.

Claims 9, 14, and 17 rejected under 35 U.S.C. 102(b) as being anticipated by the Applicant's admitted prior art.

Regarding claim 9, the Applicant's admitted prior art figure 1 and corresponding specification pages disclose an electrodeless lamp system comprising: microwave generator (2) for generating microwave by being supplied power source; a resonator (6) blocking the generated microwave and transmitting emitted light; and a bulb (5), in which filled luminescent material becomes plasma by the generated microwave to generate the light, wherein the bulb includes a primary bulb fill in order to obtain continued spectrum in discharging.

Regarding claim 14, the Applicant's admitted prior art teaches buffer gas filled in the bulb for contributing to initial discharging includes at least one or more among Ne, Ar, Kr and Xe.

Regarding claim 17, the claim limitation is an intended use claim. Structure claims are directed towards what the structure is, not what it does. Thus the claimed limitation of the capacity of the bulb has not been given patentable weight. The structural limitation of the bulb itself was disclosed above with regards to claim 9.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Choi et al. (US 6,734,630 B1), of record.

Choi ('630) discloses all of the claimed limitations except for the amount of fill.

However, Choi ('630) does disclose varying amounts of fill. One of ordinary skill in the art, without undo experimentation, could determine the optimum amount of fill to use from the disclosure of Choi ('630) for the purpose of improving the illumination of the lamp.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fill of Choi for the purpose of improving the illumination of the lamp.

Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Choi et al. (US 6,734,630 B1), of record.

Regarding claim 10, Applicant's admitted prior art teaches all of the limitations except for the primary bulb fill being stannum.

Further regarding claim 10, Choi ('630) teaches in column 3, lines 38-45, a bulb of an electrodeless lamp system using stannum (Sn) as a primary bulb fill in order to continuous spectrum in discharging.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fill of Choi in the lamp of the Applicant's admitted prior art for the purpose of continuous spectrum in discharging

Regarding claim 11, secondary reference Choi ('630) teaches the primary bulb fill is a halogenide of the Sn.

The reason for combining is the same as for claim 10 above.

Regarding claim 12, secondary reference Choi ('630) teaches the halogenide of the Sn is stannum bromide (SnBr_2).

The reason for combining is the same as for claim 10 above.

Regarding claim 13, Applicant's admitted prior art in view of Choi ('630) discloses all of the claimed limitations except for the amount of fill.

However, Choi ('630) does disclose varying amounts of fill. One of ordinary skill in the art, without undo experimentation, could determine the optimum amount of fill to use from the disclosure of Choi ('630) for the purpose of improving the illumination of the lamp.

Hence it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the fill of Choi in the lamp of Applicant's admitted prior art for the purpose of improving the illumination of the lamp.

Allowable Subject Matter


5. Claims 6, 7, 15, and 16 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph L. Williams whose telephone number is (571) 272-2465. The examiner can normally be reached on M-F (6:30 AM-3:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Joseph L. Williams
Primary Examiner
Art Unit 2879